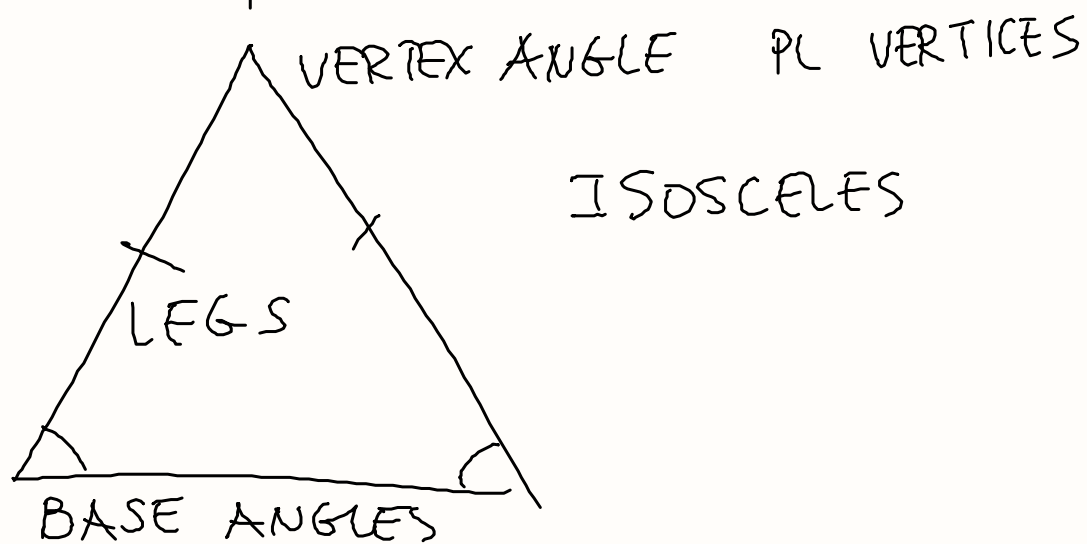


ch. 4.2 p. 204



### ISOSCELES TRIANGLE CONJECTURE C-19

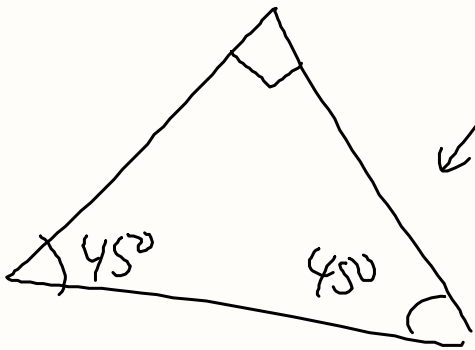
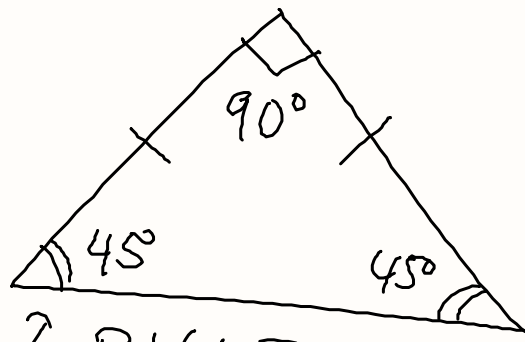
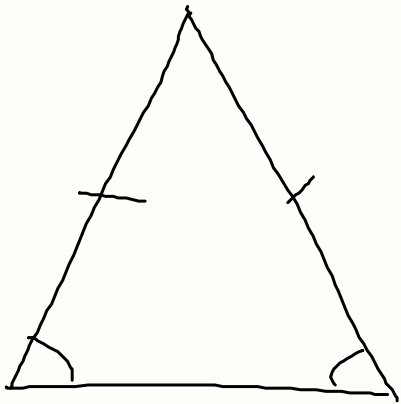
IF A TRIANGLE IS ISOSCELES

THEN BASE ANGLES AND/OR  
LEGS ARE CONGRUENT.

### CONVERS OF ISOSCELES TRIANGLE

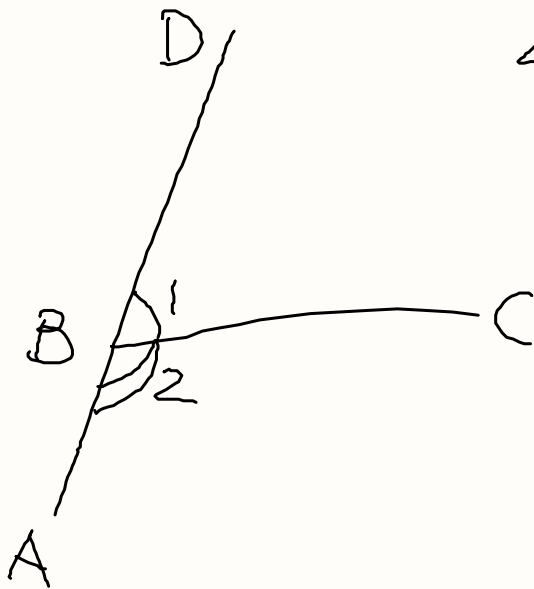
#### CONJECTURE C-20

IF A TRIANGLE HAS TWO  
CONGRUENT ANGLES, THEN IT  
IS ISOSCELES



↑ RIGHT  
ISOSCELES  
TRIANGLE  
↓

SUM OF ALL ANGLES IN  
ANY TRIANGLE IS  $180^\circ$



$$\angle 1 + \angle 2 = 180^\circ$$

SUPPLEMENTARY  
ANGLES

PRACTICE #1-6 p. 206-207

DRAWING, # PROBLEM, PAGE

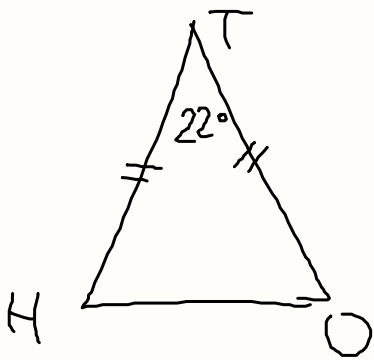
WHAT IS GIVEN? WHAT YOU HAVE TO FIND out!

SHOW CALCULATIONS AND EXPLAIN!

#1 p. 206

GIVEN  $m\angle T = 22^\circ$

$HT \cong TO$



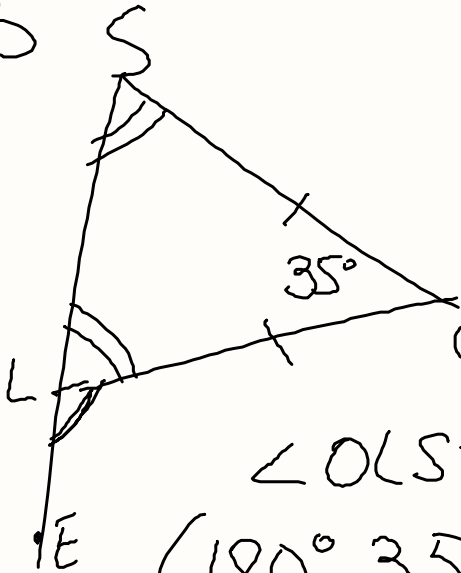
$m\angle H = ?$

$\angle H \cong \angle O$   $\triangle HTO$  IS ISOSCELES

$$m\angle H = \frac{(180^\circ - 22^\circ)}{2} = \frac{158^\circ}{2} = 79^\circ$$

$$m\angle H = 79^\circ$$

#3



GIVEN:

$$\overline{SO} \cong \overline{LO} \quad m\angle O = 35^\circ$$

$m\angle OLE?$

$\triangle SLO$  - ISOSCELES

$$\angle OLS \cong \angle LSO$$

$$m\angle OLS = \frac{(180^\circ - 35^\circ)}{2} = \frac{145^\circ}{2} = 72.5^\circ$$

$$\angle OLE = 180^\circ - 72.5^\circ = 107.5^\circ$$

$\angle OLS$  AND  $\angle OLE$  - SUPPLEMENTARY

HOME

p.207 #4-6

---